

METHOD AND SYSTEM FOR CREATING A PORTFOLIO OF STOCK  
EQUITIES BASED ON MARKET CAPITALIZATION AND SALES

CROSS-REFERENCE TO RELATED APPLICATION

5 The present application is a continuation-in-part of  
Application Serial No. 09/182,466, filed October 30, 1998.

BACKGROUND OF THE INVENTION

Field of the Invention

10 The present invention relates generally to computer-  
implemented methods and systems for performing analysis of  
information contained in a database according to a  
particular set of preselected parameters and obtaining a  
result based on such analysis. More particularly, the  
present invention relates to a computer-implemented method  
and system for creating a portfolio of stock equities by  
15 processing information contained in a database using a set  
of strategic factors so as to obtain a portfolio of  
strategically selected stocks reflecting a specific  
investment strategy.

Background and Conventional Art

20 In the securities field, financial analysts perform  
the task of following the operations and condition of  
companies whose common stock is sold to the public.

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Typically, in order to gain expertise, such analysts focus on particular economic sectors. Examples of such economic sectors are the entertainment sector, the personal services sector, the telecommunications sector, the automobile sector, and the information services sector.

An investor wishing to invest in stocks may purchase the stock of individual companies, or may purchase shares in mutual funds or units in an equity trust. While the potentially large gains from ownership of the stock of any one individual company are usually accompanied by an equally large risk of loss, investment in mutual funds or equity trusts seeks to reduce risk while maintaining a relatively high potential for gain.

Conventionally, the composition of an equity trust or mutual fund portfolio is a result of continuous analysis by many securities analysts employed by the mutual fund or sponsor of the equity trust. While the securities recommended for investment may be chosen based on an articulated objective, it is to be expected that a significant amount of subjectivity and divergence of opinion may arise in arriving at recommended securities for inclusion in the equity trust or mutual fund. Additionally, arriving at a consensus requires many hundreds of hours of human effort in collecting, reviewing, studying and analyzing information.

There thus exists a need in the art for a computer-implemented method and system for creating a portfolio of equities based on a specific strategy consisting of specifically defined parameters, and which can be implemented automatically and efficiently by analyzing information contained in a database in accordance with the

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predefined parameters to obtain an investment portfolio containing stocks satisfying the investment objective by meeting the requirements of the selected parameters.

#### SUMMARY OF THE INVENTION

5           The present invention solves the above-mentioned need, by providing a computer-implemented method and system for creating a portfolio of stock equities for investment, based on an investment objective defined by specific preselected parameters.

10           In particular, according to one preferred embodiment, the invention provides a computer-implemented method for creating a portfolio of equity stocks, comprising the steps of determining the composition of a predetermined broad based stock index by accessing a database and  
15           creating a list of the stocks making up said index; obtaining from said database for each stock in said index, data relating to at least market capitalization and sales of the company issuing the stock; creating an acceptable stock list by at least eliminating from said index list  
20           stocks having a market capitalization below a predetermined value; and sorting the acceptable list of stocks by sales and placing into said portfolio, until a predetermined number of stocks are reached, a stock having the highest sales of said remaining list.

25           According to other aspects of the invention, a computer-implemented system and a computer program product are provided for creating an investment portfolio in accordance with the features of the method described above.

### BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will become more fully understood from the following detailed description in conjunction with the accompanying drawings, in which:

5        FIG. 1 is a block diagram of a computer system according to one preferred embodiment of the present invention;

FIG. 2 is a diagram illustrating the composition of database 102 of Fig. 1; and

10        FIG. 3 is a flow diagram illustrating a computer-implemented method according to a preferred embodiment of the invention.

### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to Fig. 1, a computer-based system  
15        according to the present invention includes a data processor 100, a database 102, a storage medium 104 such as a floppy disk, a hard disk, a magnetic tape, an optical disk, or the like, a display 106 such as a CRT, a printer 108, and a communication device 110 such as a modem or  
20        network server. A keyboard device 112 and mouse input device 114 are also provided.

The storage 104 contains a computer program product containing computer-readable code, which when loaded into the processor causes the processor to perform a process  
25        which creates an investment portfolio according to the method of the invention, which is described in detail below. Once the portfolio has been created, the results can be displayed on the display 106, printed on the printer 108, or communicated to a remote server,

workstation or personal computer through the communication device 110.

Fig. 2 illustrates the structure of the database 102 according to a preferred embodiment of the invention. The database contains a listing 1021 of the composition of a broad based stock index such as, for example, the Nasdaq-100 Index®, and, for each individual stock listed, a record 1023 containing at least the market capitalization of the company (which is equal to the closing price multiplied by the total number of outstanding shares), as well as the company sales (which is equal to the sum of the quarterly sales for the most recent four quarters reported by the company).

Fig. 3 illustrates a flow diagram of a preferred embodiment of a method according to the present invention. At step 301, the computer reads into memory the composition of the broad based stock index from list 1021, to create a running list of potential candidates for inclusion into the portfolio. At step 302, the individual stock data is read from record 1023 for each stock in the broad based stock index. The method proceeds to step 303, wherein the market capitalization values of the 100 stocks are determined, and the stocks are sorted by market capitalization. At step 304, the market capitalization of the 20th stock is set as a cut-off value for accepting stocks into the portfolio. In particular, assuming all other criteria are met, a stock will not be accepted unless its market capitalization is within the top 20 percent of the Nasdaq-100.

At step 305, the stocks in the running list are sorted by sales. At step 306, the market capitalization

of the stock at the top of the list is compared with the previously determined cut-off value. If the market capitalization of the stock is less than the cut-off value, the stock is rejected at step 307.

5           At step 308, the stock is accepted, and the number of stocks in the portfolio is determined. If there are less than 10 stocks in the portfolio, the process returns to step 306 where the next stock from the top of the list is examined for market capitalization before being accepted  
10       into the portfolio. Once the portfolio reaches the preselected number (10 in the preferred embodiment), the process ends at step 309.

15           The invention having been thus disclosed, it will become apparent to those skilled in the art that the same may be varied in many ways without departing from the spirit and scope of the invention. Any and all such modifications are intended to be included within the scope of the following claims.